

# STATE OF COLORADO

Bill Owens, Governor  
Jane E. Norton, Executive Director

*Dedicated to protecting and improving the health and environment of the people of Colorado*

4300 Cherry Creek Dr. S.  
Denver, Colorado 80246-1530  
Phone (303) 692-2000  
TDD Line (303) 691-7700  
Located in Glendale, Colorado

Laboratory and Radiation Services Division  
8100 Lowry Blvd.  
Denver CO 80230-6928  
(303) 692-3090



Colorado Department  
of Public Health  
and Environment

<http://www.cdphe.state.co.us>

October 19, 2001

Mr. Joseph A. Legare  
Assistant Manager for Environment and Infrastructure  
U.S. Department of Energy  
Rocky Flats Field Office  
10808 Highway 93, Unit A  
Golden, Colorado 80403-8200

**RE: Comments on the Draft Buffer Zone Sampling and Analysis Plan**

Dear Mr. Legare:

This letter transmits comments From CDPHE on the Draft Buffer Zone Sampling and Analysis Plan. If you have questions on our comments, please contact Elizabeth Pottorff at 303-692-3429, or Carl Spreng 303-692-3358.

Sincerely,

Steven H. Gunderson  
Rocky Flats Project Coordinator

cc w/Enc: Norma Castañeda, RFFO  
Lane Butler, K-H  
Steve Paris, K-H  
Tim Rehder, EPA  
Gary Kleeman, EPA  
Dan Miller, AGO  
Administrative Records Building 850



ADMIN RECORD

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**Colorado Department of Public Health and Environment**  
**comments on**  
**Draft Buffer Zone Sampling and Analysis Plan**  
October 2001

1. Page 7, Section 2.2.1

This section should also include a discussion of the faulting on site and the potential for faults to transmit water horizontally.

2. Page 13, Decision rule 4

This rule essentially makes Tier II levels a free release standard. All Tier II levels should be evaluated to ensure this is appropriate.

3. Page 14

Refers to the Waterstone shared access data and mapping system, when will this be demonstrated to us?

4. Table 1

Trenches T-4 and T-12 are missing from this table.

5. Table 4

It appears the 'number of existing sample location' information is incomplete, for instance Trench T-1 should have more than one sampling location.

6. Section 3.1.1 Characterization of IHSSs and PACs

Decision rules 2 and 3 (page 13) mix the determination of PCOCs with the determination of AOCs. It would be clearer if the two concepts were separated as in the following:

1. If all analytical results are nondetections or are all below the background mean plus two standard deviations, a PCOC will be disqualified from further consideration; otherwise, the PCOC will be retained. Some inorganic and radionuclide concentrations may be below background levels, but above Tier II ALs.
2. AOCs will be determined based on the areal distribution of PCOC concentrations that are above detection limits and above background.

Elements of the data quality objectives listed in Section 5.1.4 of the Draft ER RSOP for Routine Soil Remediation (September 2001), including the hotspot criteria, could be added to these decision rules.

7. Page 47 Section 4.9.1

Discuss the hand off of ground water contamination from BZ IHSS and PACs in more detail. What is the decision being made with this ground water sampling?

There are many more monitoring wells that are inactive, sampling those wells would be useful in determining contaminant trends in an AOC. A list of COC's should be developed for this sampling activity. The data should be compared to historic results. This planning needs to be coordinated with the Well Abandonment and Replacement Program (WARP) in Water Programs. Many wells are scheduled to be abandoned, if ground water samples are needed to provide information to the remediation decision the BZ SAP schedule must be coordinated with the WARP schedule.

8. Page 53 Section 5.2.3

How are the remediation goals referenced here selected?

9. Figure 14

The data evaluation flow chart points to NFA but what if Institutional Controls are needed?

10. Appendix C

Page C-11- Trench T-11 does not have an IHSS or PAC number referenced and therefore can't be located on Plate 1.

Page C-12 - This appears to be a place holding comment that was not completed, what does "(as appropriate?)" mean

11. Appendix E

For those analytes with MDLs greater than action levels, the site must propose an alternate detection method or propose a practical quantitation limit. The justification for the "disqualification" of each analyte must be reviewed and approved.

Table E-12 – Why are chromium, magnesium, nitrate, cesium, Tl-208, plutonium isotopes, uranium, and quite a few organics with detectable results in this list of disqualified analytes?